

**Title: Experimental Validation and Multi-omics Analysis Identified ARPC1A As A Novel Oncogene And Potential Therapeutic Target In Glioblastoma**

**Journal: Journal of Cancer**

Jun Yang<sup>1†</sup>; Chengcheng Xue<sup>2†</sup>; Zesong He<sup>1</sup>; Li Ying<sup>1</sup>; Wei Meng<sup>1</sup>; Meihua Li<sup>1</sup>; Na Zhang<sup>2\*</sup>; Taohui Ouyang<sup>1\*</sup>

<sup>1</sup> Department of Neurosurgery, the 1st affiliated hospital, Jiangxi Medical College, Nanchang University, No.17, Yongwai Street, Nanchang, Jiangxi province, 330006, China

<sup>2</sup> Department of Neurology, the 1st affiliated hospital, Jiangxi Medical College, Nanchang University, No.17, Yongwai Street, Nanchang, Jiangxi province, 330006, China

\* Correspondence: ndyfy05017@ncu.edu.cn (TO); hustzhangna@163.com (NZ)

† These authors contributed equally to this work.

**Table S1** The clinical parameters of the patients

<b>Characteristics</b>	<b>Number of cases</b>
Age (years)	
>60	3
<60	1
Gender	
Female	1
Male	3
Tumor size (Maximum diameter)	
≥ 5 cm	4
IDH status	
Wild-type	4

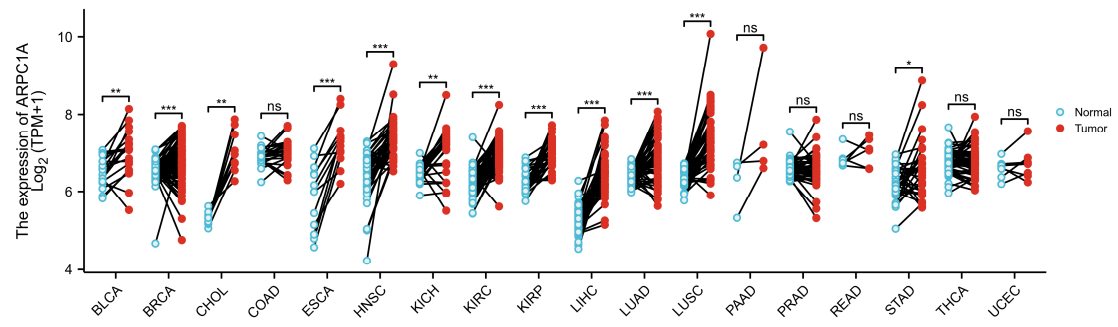
Note: IDH, isocitrate dehydrogenase

**Table S2** Complete sequences of the three siRNAs

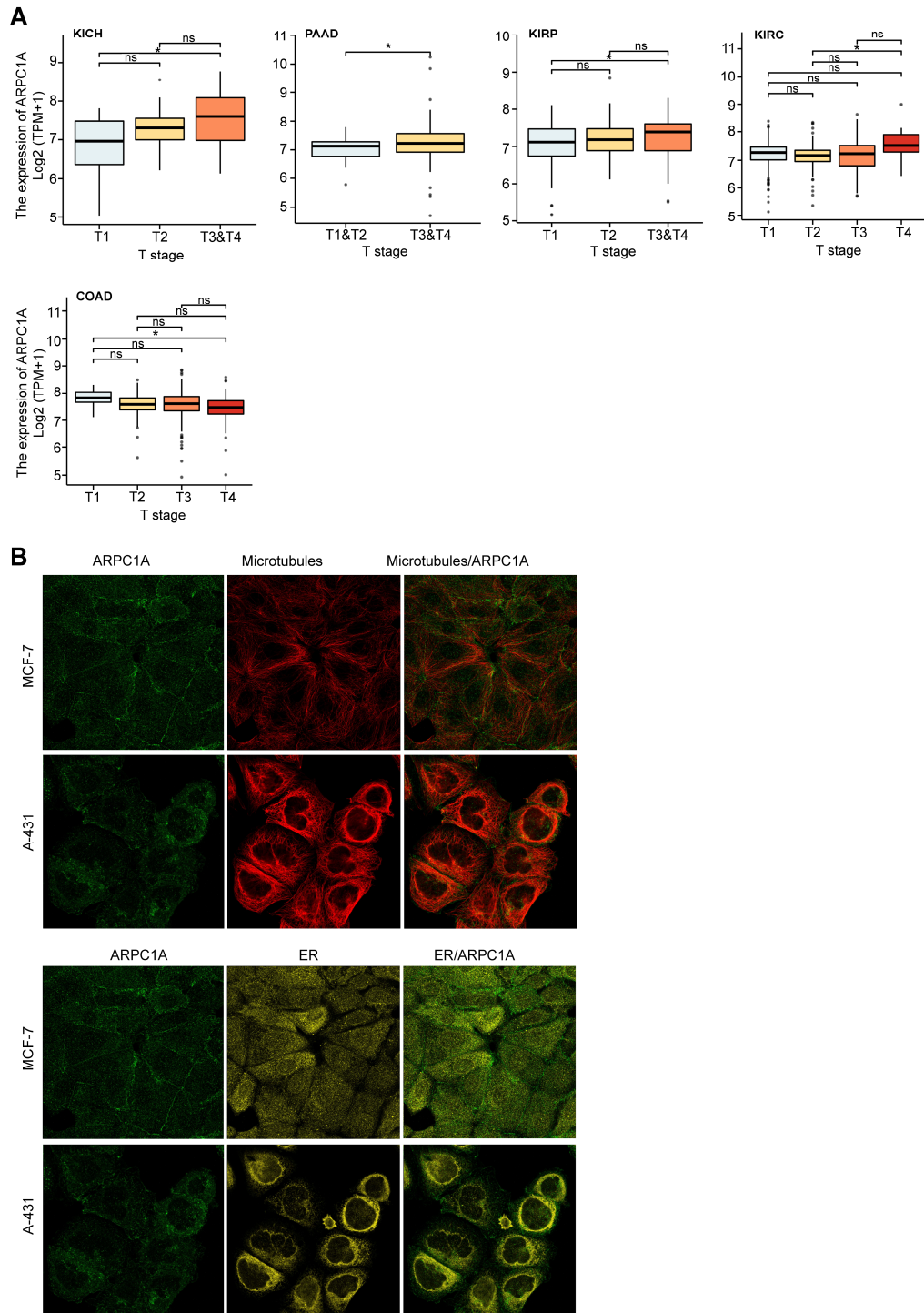
ARPC1A-1	forward: 5'-GAUUUCAUCCAUUCUUGATT-3', UCAAGAAUGGAAUGAAAUCTT-3'	reverse: 5'-
ARPC1A-2	forward: 5'-GCUCCUAAGUGUGUCAUUUTT-3', AAAUGACACACUUAGGAGCTT-3'	reverse: 5'-
ARPC1A-3	forward: 5'-UGACAAUUUGGGAUUUCAATT-3', UUGAAAUCCCAAUUGUCATT-3'	reverse: 5'-

**Table S3** Antibody Information

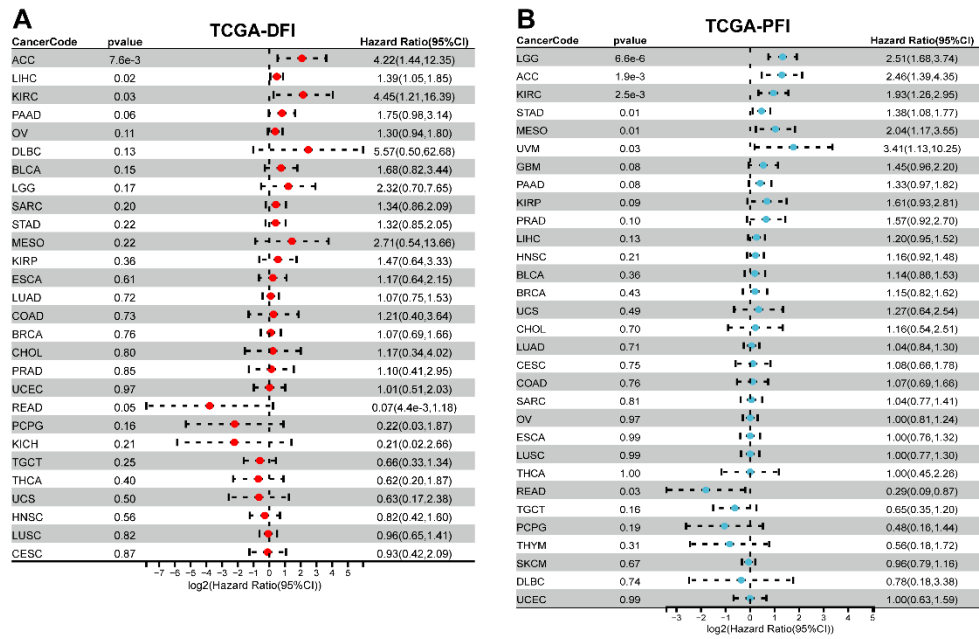
Antibody name	Catalogue Number	Source of purchase
ARPC1A	#DF6215	Affinity Biosciences
E-cadherin	EM0502	Huabio
N-cadherin	EM1607-37	Huabio
Vimentin	MA5-11883	Thermo Fisher Scientific
GAPDH	#AF7021	Affinity Biosciences
MGMT	#AF5295	Affinity Biosciences



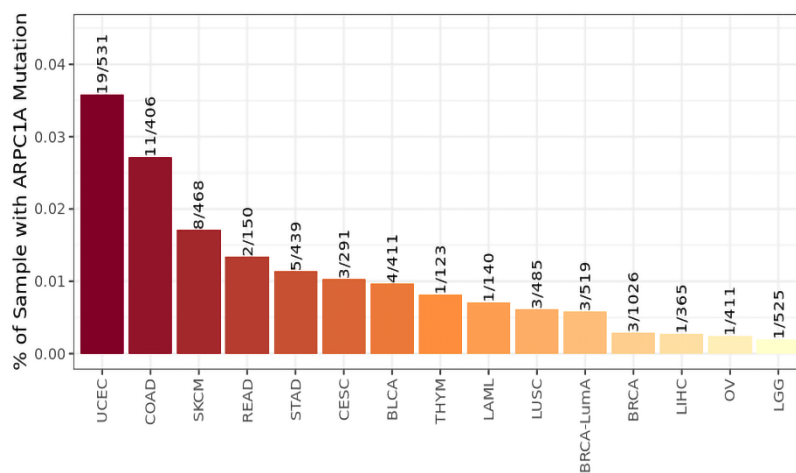
**Figure S1** Differential expression of ARPC1A in paired tumor samples



**Figure S2:** Expression pattern of ARPC1A in pan-cancer. **A** Correlation between ARPC1A expression and tumor stage. **B** Immunofluorescence images of ARPC1A in MCF-7 and A-431 cell lines were obtained from the HPA database



**Figure S3** Prognostic value of ARPC1A in various tumors. **A-B** The forest plot showed the correlation of ARPC1A with DFI and PFI in tumors using the univariate Cox regression



**Figure S4** Mutation frequency of ARPC1A in multiple cancers